



## Gulf of Mexico Harmful Algal Bloom Bulletin

11 January 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: January 8, 2007

### Conditions Report

A harmful algal bloom has been identified in patches from Sarasota to Collier County, and north and west of the Lower Keys in Monroe County. Patchy low impacts are possible today through Monday in Sarasota and Northern Charlotte County. Patchy very low impacts are possible today through Monday in Lee and Central Collier Counties. No impacts are expected for the gulf side of the Lower Keys today through Monday.

### Analysis

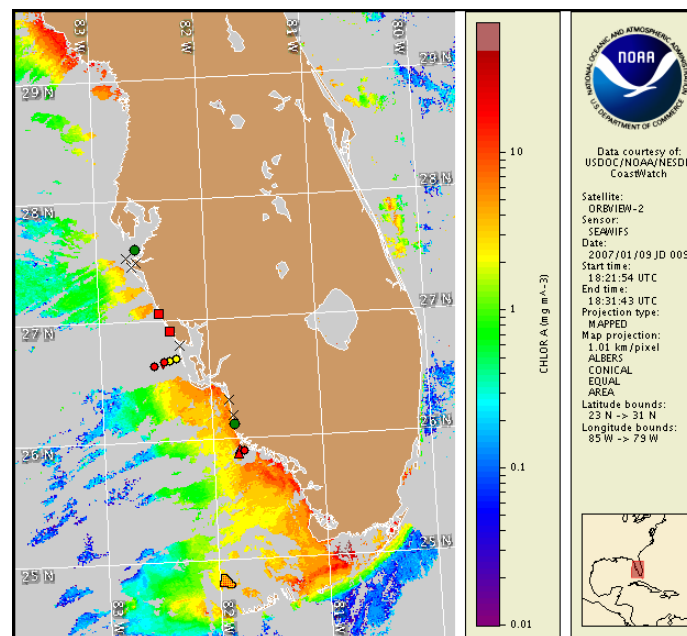
The bloom currently extends in patches from central Sarasota County to central Collier County. Samples continue to indicate that the bloom is not present in Pinellas and Manatee Counties (FWRI; 1/04). However, recent sampling results have indicated that the bloom has intensified in Sarasota, Charlotte, and Collier County. High chlorophyll concentrations were reported at Venice Fishing Pier in Sarasota and at Englewood Beach in Charlotte County (FWRI; 1/9). Medium concentrations were found offshore at Cape Romano in Collier County (FWRI; 1/3). Imagery from January 9 confirms a high patch of chlorophyll ( $\sim 10 \mu\text{g/L}$ ) offshore of Collier County, with a northern extent of  $25^{\circ}48'24''\text{N}$ ,  $81^{\circ}41'55''\text{W}$  and a southern extent of  $25^{\circ}32'52''\text{N}$ ,  $81^{\circ}25'17''\text{W}$ . Concentrations are greater than  $10 \mu\text{g/L}$  alongshore Collier County. Continued sampling is recommended. Dead fish were reported this week at Barefoot Beach, around Naples Pier, Marco Island, and Sanibel Island. Discolored water was also reported in Pinellas County (FWRI; 1/9). Easterly winds throughout the weekend will minimize coastal impacts. Little movement of the bloom is expected.

Medium concentrations were confirmed offshore of the Lower Keys (MML; 1/02). Imagery from January 9 indicates a high patch of chlorophyll north of the Lower Keys on the gulf side. Highest concentrations of chlorophyll ( $\sim 20 \mu\text{g/L}$ ) were found at  $24^{\circ}48'38''\text{N}$ ,  $81^{\circ}14'42''\text{W}$ . Continued sampling is recommended. No impacts are expected for the Lower Keys throughout the weekend.

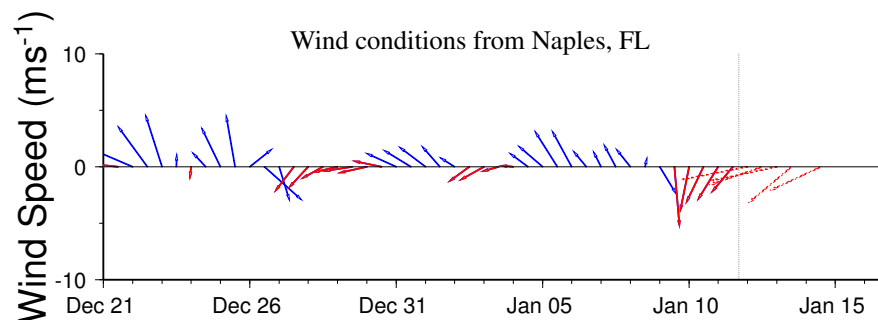
~Keller, Urizar

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1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.



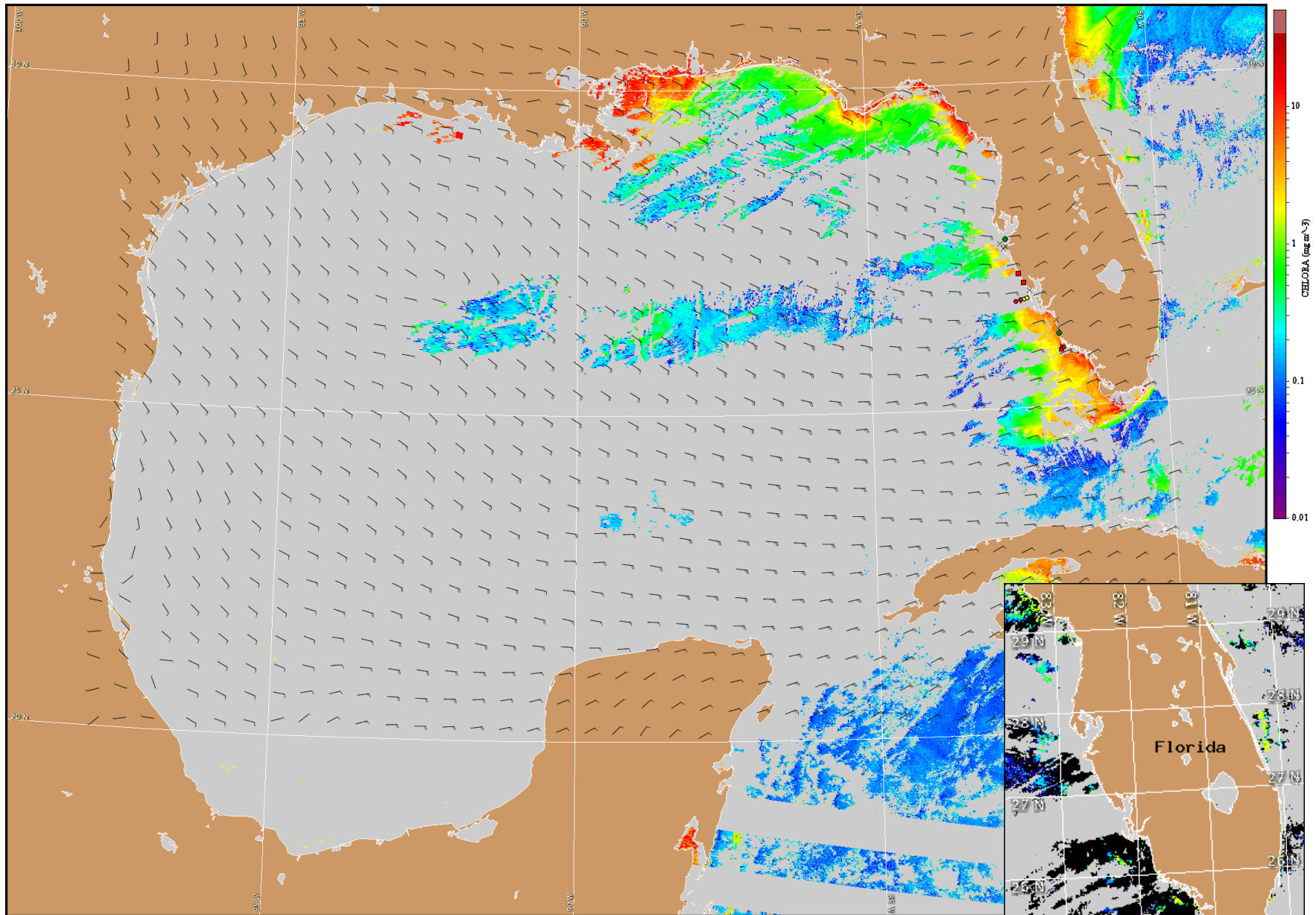
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit <http://research.myfwc.com>. Cell concentration sampling data from January 1-9 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Easterly winds today through Saturday night (15-20 knots; 8-10 m/s). Southeasterly winds on Sunday and Monday (10 knots; 5 m/s).

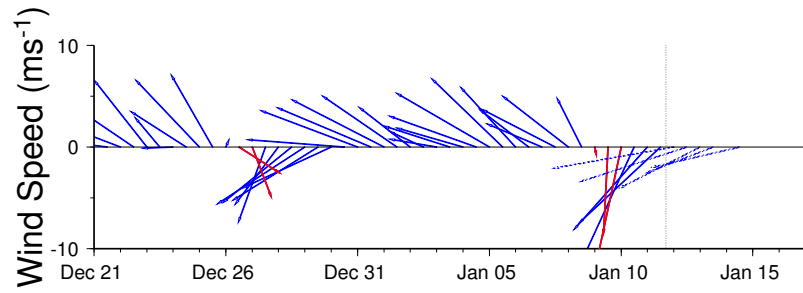
Lower Keys: Northeasterly to easterly winds today (20 knots; 10 m/s). Easterly winds tonight through Sunday (15-20 knots; 8-10 m/s). East to southeasterly winds Sunday through Monday (10-15 knots; 5-8 m/s).



Satellite chlorophyll image and forecast winds for January 12, 2007 12Z with cell concentration sampling data from January 1-9 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Sand Key, FL



Wind conditions from Venice Pier, FL

